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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,783	10/10/2001	Mei Kodama	IS8-010	9563
21567	7590	10/21/2004	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			LE, BRIAN Q	
			ART UNIT	PAPER NUMBER

2623

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/975,783	<b>Applicant(s)</b> KODAMA ET AL.	
	<b>Examiner</b> Brian Q Le	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The concept of wherein the feature value calculation means or the feature value deriving section therein is **arranged outside** the apparatus (emphasis added) is not found in the specification. The Applicant needs to point out the exact location (page number and line number) for the support in the original disclosure.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-20 are recite the limitation "the movie image" in line 1 of claims 1 and 11. There is insufficient antecedent basis for this limitation in the claim.

***Claim Objections***

5. Claim 2 is objected to because these claims are very difficult to understand due to the use of confusing language. Appropriate correction is required. The prior art rejection based on the Examiner's best understanding. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4 and 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Abdel-Mottaleb et al. U.S. Patent No. 6,253,201.

Regarding claim 1, Abdel-Mottaleb teaches a method of retrieving the movie image (column 1, lines 6-8), comprising the steps of:

sequentially inputting, into a processor, subject movie images from the movie image information comprising a number of successive images (series of images) (column 3, lines 5-10);

deriving feature values which vary in time from the signal of the inputted movie images (characteristic measures) (column 3, lines 40-50);

producing first feature value information by quantization of the time feature values of the derived signal with a predetermined width (a quantization process has predetermined width) of quantization (column 3, lines 40-65);

deriving second feature value information which corresponds to the first feature value information and which is subjected to comparison operation, stored in advance in data-base (retrieve feature value information from database) (column 4, lines 55-67); and

matching (similarity characteristic measure), using a quantization error (quantization anomalies), the first feature value information with the second feature value information in accordance with a predetermined determination formula (column 5, lines 51-67).

For claim 2, Abdel-Mottaleb teaches a method of retrieving the movie image in which said method further comprising a step of grouping the first feature value information using a predetermined standard so that third feature value information is produced, in which the second feature value information corresponding to the third feature value information is derived from the data-base storing in advance, and in which the matching for both the grouped feature value information is conducted using a grouped quantization error (the gathering of image identifier/characterization features into a list/vector/map/query and compare with the storing image by quantization error/anomalies) (FIG. 3 and FIG.4 and column 6, lines 1-33).

Regarding claim 3, Abdel-Mottaleb also teaches a method of retrieving the movie image in which numerical picture element data such as luminance, brightness, saturation, color space, or frequency distribution thereof is used as the feature value information derived from the signal of the movie image (column 3, lines 40-50).

For claim 4, Abdel-Mottaleb teaches a method of retrieving the movie image in which in performing the matching using the quantization error, the step for producing the first feature value information is stopped if necessary and the matching result up to that time is outputted (process stop by a loop Idx) (column 5, lines 65-67).

For claim 11, please refer back to claim 1 for the teachings and the explanations. In addition, Abdel-Mottaleb teaches a search result process means for outputting the result obtained at the matching process means (display) (FIG. 1, element 190).

Art Unit: 2623

Regarding claims 12-14, please refer back to claims 2-4 respectively for the teachings and the explanations.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5-8 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Abdel-Mottaleb et al. U.S. Patent No. 6,253,201 and Lim U.S. Patent No. 6,181,821 as applied to claim 1 above.

Regarding claim 5, as discussed in claim 1, Abdel-Mottaleb teaches the matching movie image in which the matching using the quantization error (please refer back to claim 1). Abdel-Mottaleb does not explicitly teach the quantization process using the value of at least one quantization period length. Lim teaches a processing of image sequences for storage management (abstract) wherein the quantization performed using the value of at least one quantization period length (column 2, lines 11-20). Modifying Abdel-Mottaleb's method of processing movie image according to Lim would be able to improve the data rate of encode input image signal and improve the buffer arrangement of image for better storage management (column 2, lines 10-25). This would improve processing and therefore, it would have been obvious to one of the ordinary skill in the art to modify Abdel-Mottaleb according to Lim.

Art Unit: 2623

For claim 6, please refer back to claim 5 for the teachings and explanations. For further information, please look at the teachings of Lim (FIG. 3A – 3D).

For claim 7, please refer back to claims 5-6 for the teachings and explanations.

Regarding claim 8, Lim further teaches a method of retrieving the movie image (processing image sequences for storage management) in which the third feature value information (signal to determine the data rate) is produced by grouping using more than one quantization period lengths (time period for multiple values) and the average or distribution representative value of representative values (selective value) of more than one quantization periods (column 2, lines 10-54). Modifying Abdel-Mottaleb's method of processing movie image according to Lim would be able to improve the data rate of encode input image signal and improve the buffer arrangement of image for better storage management (column 2, lines 10-25). Also according to Lim, it would allow third feature value to be produced by ground quantization period lengths and the average or distribution representative value. This would improve processing and therefore, it would have been obvious to one of the ordinary skill in the art to modify Abdel-Mottaleb according to Lim.

For claims 15-17, please refer back to claims 5-7 respectively for the teachings and explanations.

For claim 18, please refer back to claim 8 respectively for the teachings and explanations.

10. Claims 9-10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Abdel-Mottaleb et al. U.S. Patent No. 6,253,201 and Lim U.S. Patent No. 6,181,821, as applied to claim 1 above, and further in view of Shaw U.S. Patent No. 6,151,598.

Regarding claim 9, both Abdel-Mottaleb and Lim do not explicitly teach

Art Unit: 2623

a method of retrieving the movie image in which, by using numerical data in synchronized audio information accompanying to the movie image information, retrieving of the movie image is conducted using an audio signal. Shaw teaches a method of managing a digital/multimedia library (audio/media clip/movie/video) (FIG. 3-4, 6 and column 4, lines 43-47) by using numerical data in synchronized audio information accompanying to the movie image information, retrieving of the movie image is conducted using an audio signal (column 19, lines 53-67 and column 20, lines 1-20). Modifying Abdel-Mottaleb's method of processing movie image according to Shaw would be able to improve data access facility in data management (column 19, lines 53-55). This would improve processing and therefore, it would have been obvious to one of the ordinary skill in the art to modify Abdel-Mottaleb according to Shaw.

Referring to claim 10, please refer back to claim 4 for the teaching and explanation.

For claim 19, please refer back to claim 9 respectively for the teachings and explanations.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abdel-Mottaleb et al. U.S. Patent No. 6,253,201.

Regarding claim 20, as discussed in claim 1, Abdel-Mottaleb teaches the concept of feature value calculation means or the feature value deriving means (please refer back to claim 1). Abdel-Mottaleb does not explicitly disclose whether these section can be arranged outside the apparatus. However, it is obvious for one skilled in the art as a design choice to have a certain computation part/unit not in the same housing/outside of the apparatus. This design choice still allows all the units to work together as long as they are connected together by connections. Thus, it would have been obvious for one of the ordinary skill in the art to modify

Art Unit: 2623

Abdel-Mottaleb to have a certain unit (feature value calculation means or feature value deriving means) to be arranged outside the apparatus.

### *CONCLUSION*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to image/video/image sequences management:

U.S. Pat. No. 6,192,151 to Miyatake, teaches video retrieval method.

U.S. Pat. No. 6,330,76 to Mochizuki, teaches user-friendly information processing device for retrieving and displaying objects.

U.S. Pat. No. 6,349,297 to Shaw, teaches information processing system.

U.S. Pat. No. 6,408,301 to Patton, teaches interactive image storage, indexing and retrieval system.

U.S. Pat. No. 6,285,995 to Abdel-Mottaleb, teaches image retrieval system using a query image.

U.S. Pat. No. 6,163,622 to Abdel-Mottaleb, teaches image retrieval system using a query image.

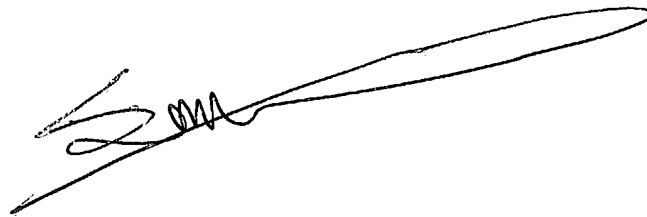
Art Unit: 2623

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 703-305-5083. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC Customer Service whose telephone number is 703-306-0377.

BL  
October 13, 2004

A handwritten signature in black ink, appearing to read 'SAMIR AHMED', with a long, sweeping horizontal stroke extending to the right.

**SAMIR AHMED  
PRIMARY EXAMINER**